

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

## C-A OPERATIONS PROCEDURES MANUAL

### ATTACHMENT

#### 4.120.6.a 6 O’Clock (PEER 7) Critical Device & Permit Link Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.6		

#### Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: Signature on File  
 Collider-Accelerator Department Chairman                      Date                     

V. Castillo

#### 4.120.6.a 6 O’Clock (PEER 7) Critical Device & Permit Link Tests

### PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: \_\_\_\_\_ Checksum: \_\_\_\_\_

Division B Software Filename and Checksum: Title: \_\_\_\_\_ Checksum: \_\_\_\_\_

**Initial testing complete:**

Test Team Leader’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Test Team Leader’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Acceptance test procedure complete (following repairs and retesting if required):**

Test Team Leader’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Test Team Leader’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Test results reviewed by:**

Safety Section Head’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Safety Section Head’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Test results accepted by Radiation Safety Committee:**

RSC Member’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

RSC Member’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

## 1.1 Setup to test the Critical Devices and Permit Link response to a loss of PASS enable.

<input type="checkbox"/>	<b>SET</b>	<b>CD Key switch</b> for	<b>XY ARC</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>CD Key switch</b> is set for	<b>XY ARC</b>
<input type="checkbox"/>	<b>PLACE</b>	<b>Peer 7 in Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>Controlled Access</b>	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Inj. CD</b> on CD page	<b>DISABLED</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Injn CD inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/>	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC ring CD</b> , (B/S 1,2, & 3) on CD page	<b>DISABLED</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC ring inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/> (BS 1&2)	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Reachback latch inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/> (BS3)	<b>OFF</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Permit Link Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/>	<b>DISABLED</b>
	<b>CLOSE</b>	<b>Peer 7 gates:</b> XGI2, YGI2, 7GS1	
	<b>RESET</b>	<b>Peer 7 gates:</b> 5GS1, 5EL1, 5GE1, 5ED1, 6GE1, 6GE2, 6MD1, 6ED1, 6GE3, 6EL1, 6ED2	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7 gates:</b> <input type="checkbox"/> 5GS1, <input type="checkbox"/> 5EL1, <input type="checkbox"/> 5GE1, <input type="checkbox"/> 5ED1, <input type="checkbox"/> 6GE1, <input type="checkbox"/> 6GE2, <input type="checkbox"/> 6MD1, <input type="checkbox"/> 6ED1, <input type="checkbox"/> 6GE3, <input type="checkbox"/> 6EL1, <input type="checkbox"/> 6ED2 are	<b>RESET</b>
	<b>SWEEP</b>	<b>Peer 7 Zones:</b> 5Z1, 6Z1, 6Z2	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7 Zones:</b> <input type="checkbox"/> 5Z1, <input type="checkbox"/> 6Z1, <input type="checkbox"/> 6Z2 are	<b>SWEPT</b>
<input type="checkbox"/>	<b>PLACE</b>	<b>Peer 7 in Mode 24</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>No Access</b>	<b>MODE 24</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Inj. CD</b> on CD page	<b>DISABLED</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Injn CD inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/>	<b>OFF</b>
<input type="checkbox"/>	<b>SET</b>	<b>RHIC Primary Beamstop command</b>	<b>OUT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>RHIC Primary Beamstop command</b> is	<b>OUT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC ring CD</b> , (B/S 1,2, & 3)	<b>DISABLED</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC ring inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/> (BS 1&2)	<b>OFF</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Reachback latch inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/> (BS3)	<b>OFF</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Permit Link Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/>	<b>ENABLED</b>
<input type="checkbox"/>	<b>Check for acceptance of Setup to test the Critical Devices and Permit Link response to a loss of PASS enable.</b>		

## 1.2 Test of Critical Devices and Permit Link response to loss of PASS enable

<input type="checkbox"/>	<b>VERIFY</b>	<b>CD Key switch</b> is set for	<b>XY ARC</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>No Access</b>	<b>MODE 24</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Inj. CD</b> on CD page	<b>DISABLED</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>RHIC Injn CD inhibit Div A</b> <input type="checkbox"/> and <b>Div B</b> <input type="checkbox"/>	<b>OFF</b>

- |                          |                 |  |                 |
|--------------------------|-----------------|--|-----------------|
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>RHIC Primary Beamstop command is</b>  | <b>OUT</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC ring CD, (B/S 1,2, &amp; 3)</b>   | <b>DISABLED</b> |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC ring inhibit Div A <input type="checkbox"/> and Div B <input type="checkbox"/> (BS 1&amp;2)</b>     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC Reachback latch inhibit Div A <input type="checkbox"/> and Div B <input type="checkbox"/> (BS3)</b> | <b>OFF</b>      |
|                          | <b>TURN OFF</b> | <b>Any key in the RHIC Key Tree</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees Peer 7 go to</b>   | <b>MODE 2</b>   |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC Inj. CD on CD page</b>  | <b>DISABLED</b> |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC Injn CD inhibit Div A <input type="checkbox"/> and Div B <input type="checkbox"/></b>               | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC ring CD, (B/S 1,2, &amp; 3) on CD page</b>  | <b>DISABLED</b> |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC ring inhibit Div A <input type="checkbox"/> and Div B <input type="checkbox"/> (BS 1&amp;2)</b>     | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MCR sees RHIC Reachback latch inhibit Div A <input type="checkbox"/> and Div B <input type="checkbox"/> (BS3)</b> | <b>OFF</b>      |
|                          | <b>PLACE</b>    | <b>Peer 7 in Mode 8</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>Peer 7 is in Restricted Access</b>  | <b>MODE 8</b>   |
- ☐ **Check for acceptance of Test of Critical Devices and Permit Link response to loss of PASS enable**

#### END OF TEST PROCEDURE

**TTL: Sign for completion of initial testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**TTL: Sign for completion of final testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_